Upper Roanoke River (Roanoke and Botetourt Counties, Cities of Roanoke and Salem, Town of Vinton)
TMDL Implementation (Clean-up) Plan Development
Steering Committee Meeting Notes
Virginia Department of Environmental Quality, 3019 Peters Creek Rd., Roanoke, VA
August 20, 2014 1:30 pm

ATTENDEES

- Sarah Baumgardner, Mike McEvoy (Western Virginia Water Authority)
- Bill Modica (Upper Roanoke River Roundtable)
- Bill Tanger (Friends of the Roanoke and Friends of the Rivers of Virginia)
- Margie Lucas (Mill Mountain Garden Club)
- Wendy Jones (Williamson Road Area Business Association)
- Liz Belcher (Roanoke Valley Greenways)
- Tom Dale (Lumsden Associates)
- Staci Merkt (Mountain Castles SWCD)
- Dave Henderson, Tarek Moneir (Roanoke County)
- Christopher Blakeman, Megan Scott (City of Roanoke)
- Anita McMillan (Town of Vinton)
- Ashley Hall (EEE on behalf of VDOT)
- Jay Roberts, Mary Dail, Diana Hackenburg, Kip Foster, Charlie Lunsford (DEQ)
- Larry Iceman (Smith Mountain Lake Association)
- Paul Bender, Marcus Aguilar (Virginia Tech)
- Kafi Howard (Town of Blacksburg)
- Ed Wells (Roanoke Valley Alleghany Regional Commission)
- Nick Tatalovich, Erin Hagan (Louis Berger Group/DEQ Contractor)
- Josh Pratt (Salem City)
- Tom Cain (Lick Run Watershed)

Welcome, Introductions and Meeting Guidelines
Handouts: *Updated Best Management Practices (BMPs) by Subwatershed, Updated BMP Efficiencies and Costs*

Overview of TMDL and Clean-up Plan Process (presentation)

Working Group Reports

- Reports will be circulated and placed on website

Business Working Group (Wendy Jones)

- Key Topics & Recommendations
  - Map of existing BMPs to be included in the discussions
  - Confusion of the implementation of the plan being mandatory vs. MS4
  - Businesses concerned about bearing burden of costs
  - Businesses not interested in retrofits

- Most stormwater ponds are dry ponds and not associated with individual businesses
  - ponds mapped in County, not City
- maintenance costs for BMPS should be explained in the plan because BMPs will only provide removal if properly retained
- should be technical assistance to help businesses
- low-impact development resources for businesses

Residential & Agricultural Working Group (Margie Lucas & Mary Dail)

- Key Topics & Recommendations
  - Mill Mountain Garden Club – Scoop the Poop campaign (signage, grants, pledges, etc.)
  - Concern about septage haulers
    - Recommendation to talk about how to deal with inappropriate management by septage haulers
  - Pet waste
    - Plan should account for current pet waste stations and continued station maintenance
  - Pet waste composters should be built into the plan
  - Increase E&S inspections/inspectors should be increased
  - Ag programs should be inclusive of nontraditional producers
  - Make BMP specifications very clear
  - Ed/Outreach - Programs to encourage homeowner participation (i.e. Pearl Homes) – Logperch Homes?
  - Septic maintenance/straight pipe education and outreach needed in the plan
  - Outreach/educational literature specific to septic haulers may also be needed

Government Working Group (Mary Dail)

- Key Topics & Recommendations
  - Needs for septic systems, straight pipe maintenance
  - Considering ordinances for septic maintenance, pet waste
  - Adding additional funding sources (VA revolving loan fund)
  - Talked about areas to target for septic system work
  - Appropriate BMPs for specific watersheds
- MS4 work session - Spin-off of Government WG

<u>BMPs and UPDATES</u> (presentation and discussion)

- Street Sweeping Discussion
  - Proposing that Roanoke County start street sweeping? VDOT controls roads.
    - Included because cooperation between the County and VDOT could occur to create a program
    - It is a cost-effective and efficient BMP for reducing sediment
    - Would Roanoke County or VDOT get the MS4 credit?
      - Good question to ask the MS4 program
  - Should Vinton's program be included even if it will not be expanded?
    - It will be mentioned in the plan as a recommendation
- Was information procured from VDOT regarding their existing stormwater BMPs?

    - Data request with some detail given – 3 detention ponds reported in the watershed
        - Information came from their MS4 annual report
        - Spatial information included, but tabular specifics not included
        - VDOT will meet their WLA as required by the permit
        - Stakeholder suggested that VDOT's BMP location information is important to know
- Riparian Buffers
    - Question about whether there is a threshold to be included as a BMP?
    - Stakeholder noted that there were projects done on Glade Creek and Tinker Creek that need to be accounted for
- General Discussion about BMPs
    - How would the localities get credit for private septic system maintenance and repairs?
        - Information of system would be reported to VDH; VDH would need to cooperate with localities to share the information
        - Failing septic systems are treated as a separate load in TMDL development
        - BMPs are quantified by land use and not by jurisdiction
    - Stakeholder asked if BMPs could be split out by individual MS4 areas?
        - The TMDL Implementation/Clean-up Plan goal is to meet the pollutant reductions called for in the TMDLs and **not** to prescribe BMPs for inclusion in MS4 TMDL Action Plans. Permittees are responsible for developing TMDL Action Plans as defined by MS4 permits.
        - Stakeholder commented that breakdown by subwatershed does not help
        - TMDLs are developed on a watershed basis
        - Stakeholder commented that TMDL Action Plans must be consistent with the TMDL Implementation Plan and it is hard when the BMPs are not broken up by MS4 areas. Response that TMDL Implementation Plans
        - During the WG meeting discussion, a stakeholder mentioned creating a regional group to develop coordinated TMDL Action Plans

Clarification regarding MS4 TMDL Action Plans and TMDL Implementation Plans:

With respect to general and individual MS4 permits, implementation of and compliance with local TMDL wasteload allocation(s) will be achieved through permit reissuances and the required MS4 Program Plan updates. More specifically, permittees will be required to update their MS4 Program Plans to include TMDL Action Plans to address local TMDL wasteload allocations as permits are reissued. TMDL Action Plans will identify BMPs and other management strategies to be implemented by the MS4 owner to achieve compliance with the TMDL wasteload allocation. TMDL Action Plans can be implemented in multiple phases over multiple permit cycles using an adaptive iterative approach (i.e. the action plans can and most likely will be revised) provided that permittees demonstrate adequate progress in achieving the WLA(s). Implementation of the TMDL Action Plans is tracked via annual reports prepared by the MS4 owner.

TMDL Implementation plans (IPs) are designed to meet TMDL pollutant reduction targets within a watershed based on landuse as defined by TMDL studies. IPs may be utilized by localities for pollutant reduction strategies; however they are not considered a requirement for permit compliance. Further, IPs do not prescribe specific BMPs for localities to implement to meet their MS4 permit requirements.

- Stakeholder commented that, ideally, as a region, we want to hit the yellow highlighted targets.
  - How does the MS4 do the work that is needed for septic problems and get credit for that work in their plan if failing septics is a separate load?
  - The Clean-up Plan defines the BMPs needed to meet pollutant reduction goals called for by the TMDLs. Failing septic system estimated loads are being addressed by BMPs per subwatershed.
- Stakeholder asked how do we control for changes in land use that will continue to happen in the watershed?
  - Original TMDLs were developed using 1996 land use
  - The Clean-up plan updated that to 2006 land use
  - Future land use changes would require revisions to the TMDLs
  - National Land Cover Dataset for 2011 now available, but too late in this process to use
  - The Clean-up Plan is a starting point; water quality monitoring data will ultimately be the way Clean-up Plan progress is demonstrated
- A discussion about Virginia's water quality standards and the fact that they are extremely protective
- Stakeholder requested that GIS shapefiles should be provided to the municipalities instead of them having to do a FOIA request
  - GIS layers that are not considered "draft" can be made available
  - Clean-up Plan specific GIS layers will be available once the Plan is finalized
- Some stakeholders expressed concern over the lack of connection between this project and the localities
- Section 319 Grant Money can only be spent in parts of the subwatersheds that are not covered by a permit (such as an MS4 permit or Industrial Stormwater General Permit)
- Stakeholder mentioned that this should be a Phase I/starting point? Where clean-up efforts/BMPs go from here can be up to the Steering Committee
  - Phase II should connect the localities better with the plan – jurisdictional responsibility
  - Efforts to improve water quality can go beyond the Clean-up Plan
  - This plan is different than other plans because of the scale and time that has elapsed since the TMDLs were completed
- Stakeholder expressed interest in the TMDL Allocation scenarios:

TMDL Wasteload Allocations (WLAs):

- Benthic TMDL Development for the Roanoke River (sediment): Allocations are presented in the Executive Summary (starting on page E-8) and Chapter 7; Industrial Stormwater and Construction Stormwater permit WLAs are contained in Appendix D (EPA approval: 2006)
- Bacteria TMDLs for Wilson Creek, Ore Branch and Roanoke River Watersheds: Allocations are presented in the Executive Summary (starting on page E-8) and Chapter 5 (EPA approval: 2006)
- Fecal Coliform Total Maximum Daily Load Development for Glade Creek, Tinker Creek, Carvin Creek, Laymantown Creek and Lick Run: Allocations are presented in the Executive Summary (starting on page xix) and Chapter 5 (EPA approval: 2004)

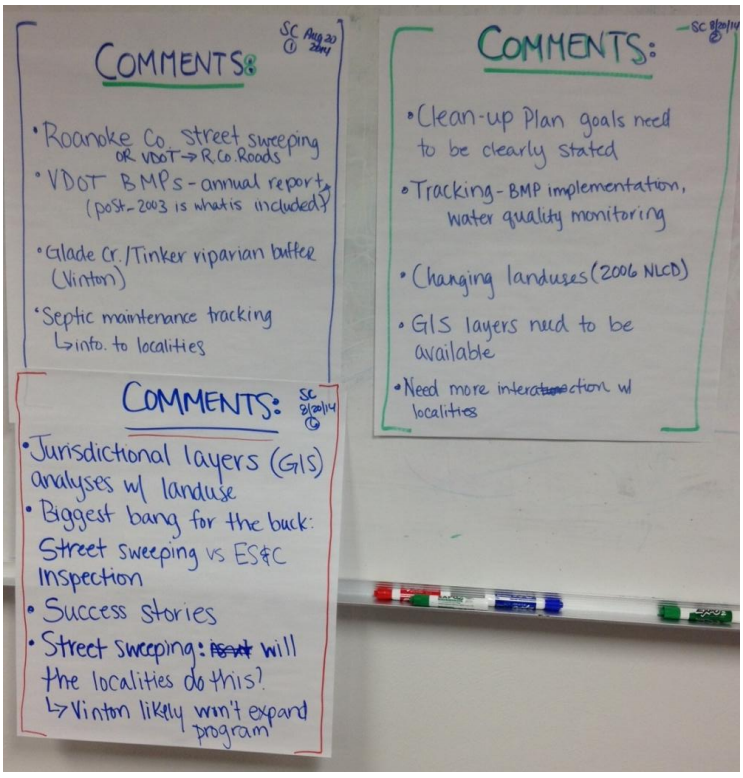
- Watershed Allocation scenario reflects bacteria loads and reductions from the original TMDL
  - Septic system estimates were reviewed by VDH
- Stakeholder commented that Street Sweeping is in the plan to meet the LA, but the City of Roanoke will be counting it for their WLA reductions
- Could street sweeping and land use conversion be included in the BMP tables?
- Comment was made that we need to make sure the load reductions and efficiency calculations are included in the plan for each BMP
- Stakeholder commented that BMP costs look low; Stakeholders are encouraged to comment on specific BMP costs
  - $20,000 acre/manufactured acre > more like $20,000 per ¼ acre-treated
  - $5,000 acre/rain garden looks low
  - DEQ should include these cost estimates for plans throughout the state
  - Retrofits which are likely in this situation will shoot the cost way up
- City of Roanoke has challenges in meeting resurfacing goals and that will continue into the foreseeable future. As roads degrade, they create more sediment; they may choose to increase those efforts over purchasing a new sweeper
- Stakeholder commented that the Plan needs to take into consideration Erosion and Sediment Control requirements and increasing restrictions
- Roanoke County asked if DEQ is saying they can meet their WLA with just street sweeping? DEQ suggested that the County discuss MS4 WLA compliance with DEQ MS4 Staff. Roanoke County wanted the name of someone in the MS4 program to contact. Jaime Bauer is the MS4 Program Manager and would be a good person to start with.
- Roanoke County does not street sweep and there would be resistance to starting efforts
- Street Sweeping more cost-effective; more cost-effective BMPs will be prioritized
  - Vinton not expanding their program
- The group revisited the discussion from previous meetings regarding infiltration basins vs. soils. Site surveys would need to be completed prior to BMP installation. This note will be included in the Clean-up Plan
- Stakeholder asked about Forestry BMPs
  - There is not a large sediment load from forestry
  - Reductions may be required from forests for bacteria based on wildlife. This approach is taken for watersheds where all other source reductions have occurred. Wildlife loads are generally not addressed unless there is a nuisance wildlife population in a specific subwatershed [and then the Virginia Dept. of Game and Inland Fisheries will be consulted].
  - Watersheds of concern for timber harvesting
    - Back Creek, Tinker Creek, Masons Creek, Roanoke River (all except Lick Run and Peters Creek)
    - A stakeholder noted that these harvests are regulated by the state; localities have no power over timber harvests
- Land Use Conversion discussion
  - What types of land uses are being converted? All landuses that could be converted into areas with trees (example: I-581 medians, parking lot islands)
  - Why was 1% used in the BMP tables? Starting point for implementation; 1% equals about 500 acres for the whole plan (Source – Regional Commission Urban Tree Canopy study)

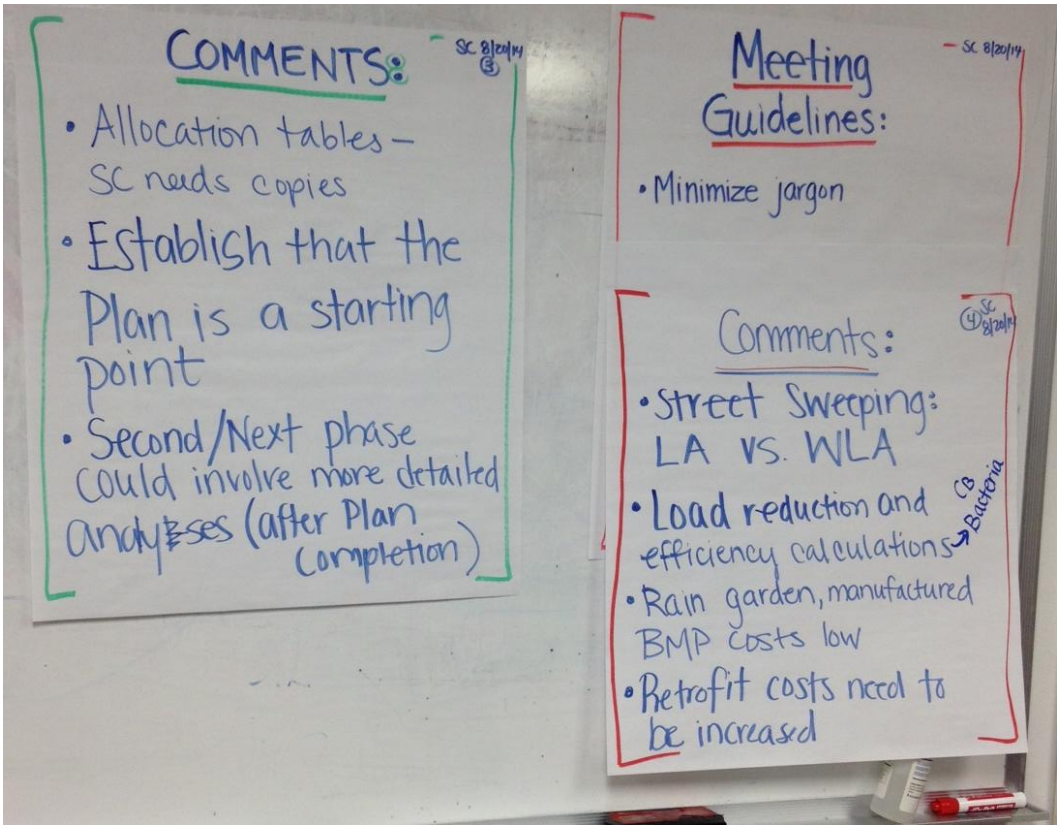
- Are these TMDLs "nested"? Tinker Creek TMDL assumes that the feeding tributary TMDLs will be met
    - Not doubling loads of what needs to be reduced

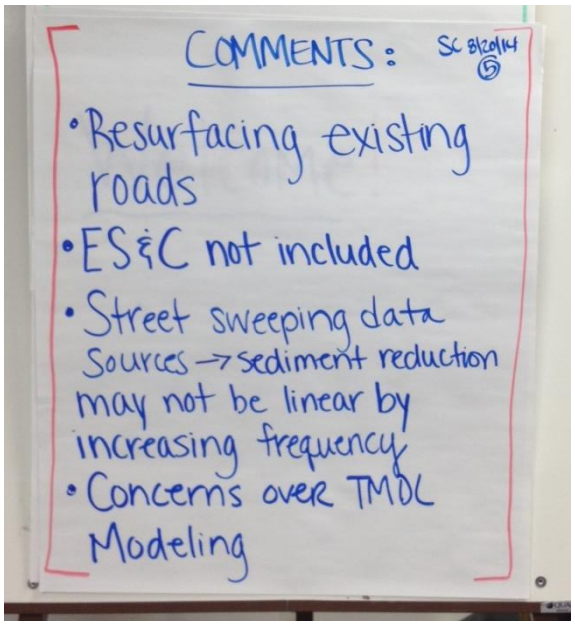
Final Discussion

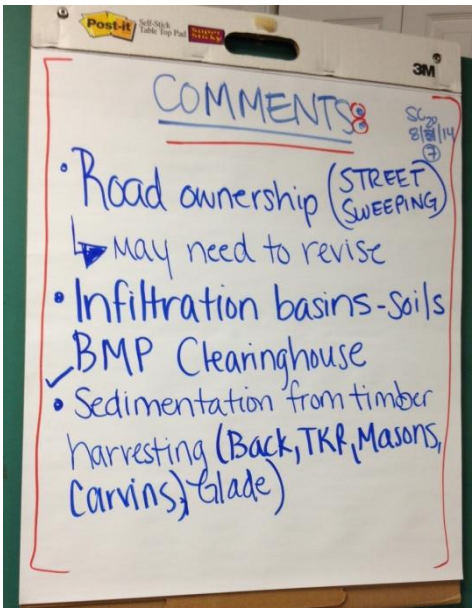
- **Staging and Milestones, Funding Sources, Monitoring Plan and Technical Assistance discussion will be saved for the next Steering Committee Meeting**
- Stakeholder asked what was meant by "Technical Assistance" (TA)
    - Clean-up plan will build in some TA
        - Example – Agricultural side includes costs Full Time Employee for the local SWCD
        - The Steering Committee needs to discuss how to allocate Technical Assistance for to support the pollutant reduction strategies for the stormwater component
        - Question was asked about how you break it out by County vs. MS4? Technical assistance will need to include the assistance needed for BMP support in areas outside of MS4s
        - The goal is to quantify cost for Technical Assistance that covers the whole plan area (i.e. TA won't be assigned to specific subwatersheds)
- The group was asked to please **submit any additional comments to Mary Dail (mary.dail@deq.virginia.gov or 540.562.6715) by Wednesday, September 10th**, unless there were objections. There were no objections.

FLIP CHARTS:




COMMENTS:
SC 8/20/14 (3)
• Allocation tables – SC needs copies
• Establish that the Plan is a starting point
• Second/Next phase could involve more detailed analyses (after Plan Completion)
Meeting Guidelines:
SC 8/20/14
• Minimize jargon
Comments:
SC 8/20/14 (4)
• Street Sweeping: LA vs. WLA
• Load reduction and efficiency calculations → Cb Bacteria
• Rain garden, manufactured BMP costs low
• Retrofit costs need to be increased


COMMENTS:
SC 8/20/14 (5)
• Resurfacing existing roads
• ES&C not included
• Street sweeping data sources → sediment reduction may not be linear by increasing frequency
• Concerns over TMDL Modeling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COMMENTS:
SC 8/20/14 (6)
• Road ownership (STREET SWEEPING)
↳ May need to revise
• Infiltration basins - Soils
BMP Clearinghouse
• Sedimentation from timber harvesting (Back, TKR, Masons, Carvins, Glade)